



ISSN: 1813-1638

The Medical Journal of Tikrit University

Available online at: www.mjotu.com

العراقية
المجلات الأكاديمية العلمية
IRAQI
Academic Scientific Journals

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Keywords:

Family Physicians' Perceptions
IUCD
pregnancy outside uterus
Mosul City

ARTICLE INFO

Article history:

Received 10 Aug 2017
Accepted 01 Dec 2018
Available online 01 June 2019

Family Physicians' Perceptions of Intrauterine Contraceptive Device in Mosul City

ABSTRACT:

Background: (Intrauterine contraceptive Device) are contraceptive method that is safe, reversible and effective contraception, in the world more than 100 million female used the device. **Aim :** to detect the knowledge of Family physicians in Mosul related to the harmful effect and contraindications to use intrauterine device and what these knowledge compared with clinical guidelines.

Patients and Methods : This study was conducted in Mosul city included all Family physicians ,using a cross sectional study design from the 1st of June to the 1st of September 2017 .94 Family physicians included in the study ,standardized questionnaire form was used including: years in practice ,sex, and age also take information from family physician's about prescriptions or insertions of device . the following part of the questionnaire, asked Family physicians about detecting minor and major complications of intrauterine contraceptive device , In the third part: Family physicians were asked to recommend (copper intrauterine contraceptive device, marina ,none)as an option in 15 situations.

Results : overall there were 63% were females physicians and the rest were males. About 38.8% of respondents used to prescribe intrauterine device,40% inserted them. female doctors were more likely than male doctor to use (56% vs. 9%)and insert Intrauterine devices (61% vs. 3%),about 38% of respondents were interested in Intrauterine device course. More than 60% of respondents ranked Pelvic inflammatory disease &perforation as a major risk of Intrauterine device .About 72.2% thought thrown was a major risk of failure of Intrauterine device. Regarding the indications of Intrauterine devices, lots of participant not recommend device to female with no children women 65.5% and for patient with fibroid(63%). For postcoital contraception(46%)not recommend Intrauterine device.

Conclusion : the study revealed family physician misconception of intrauterine contraceptive device like relation of device with perforation of uterus ,pregnancy outside uterus ,and pelvic inflammatory disease .result of study advice to educate family physician in programmed of training. Another researches needed to increase family physician awareness about intrauterine contraceptive device

DOI: <http://dx.doi.org/10.25130/mjotu.25.01.02>

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Introduction

IUCDs is type of birth control device that is inserted into the uterus ,any women who is considering using this birth control method should be aware of the possible complications including infection ,menstrual irregularities which may lead to anemia, other type of complication are expulsion of the device from the uterus within the first year, expulsion most likely to occur during the first three months after insertion.(3)

Some women may develop pregnancy while she had IUCD ,other one may develop medical condition known as pelvic inflammatory disease,

More sever IUCD complications may include ectopic pregnancy and damage to uterus and tubes which may lead to permanent infertility.(3,4)

There are two types of IUCD in our country , copper IUCD which can remain in the uterus for up to 10 years, copper ions released by the IUCD are toxic to sperm , thus preventing fertilization. A another type marina (progesterone releasing) this type can remain in the uterus for up to 5 years, levonorgestril impair sperm motility and viability , thus preventing fertilization the levonorgestril better method for women with heavy menstrual flow.(5,22)

more than 2000 study in the word about IUCD reported that the usefulness of IUCD were under reported and the harmful effect of IUCD were exaggerated(6)

many studies found that that family physicians were most important source of information to female patient when decide to put IUCD(7) . there are many survey done in the world on IUCD , found that small number of physicians insert IUCD and large number of physician did not recommend IUCD to patient because prices of IUCD and side effect of it(8).

A recent study estimate that 48% of unintended conception occurred during months when contraception was used , indicating a need to shift to more effective method to reduce the rate of unintended pregnancy in U.S., IUCDs are among the most effective and cost-effective of this methods(9). In a survey physicians saying that they have seen an increase in demand for any type of contraception in the past 5 years , both obstetricians \gynecologist and family practitioners name the IUCDs as the method that has had the greatest increase in demand(10).

An Australian study found that more than 30% of family physicians only prescribe IUCD.(11).

Usually the women take their information about IUCD from their

FPs about safety ,effective and side effect of IUCD so we need many studies about knowledge of family physision about IUCD(12).

Aim of the study:

The aim of the present study was to detect the knowledge of family physisions in Mosul. regarding effectiveness and side effect of IUCD and dangerous effect like bleeding and other effect of IUCD, and also to see how many FPs in Mosul prescribe or insert IUCD.

Patients and methods:

Administrative and ethical consideration

Prior to data collection, essential official permission were obtained from Nineveh Health Directorate.

Study setting

The cross section study was conducted in Mosul city ,all FP's in the city were included in a survey.

Study design: The cross section study

Study period

The study has been conducted during a period of three months extending from 1st June to 1stseptember 2017.

Study sample

To achieve the aim of the present study 94 family physicians included in the study who represent all specialist and residents of family medicine.

questionnaire form about sex, age, and years in practice included in the study , also physicians asked if they

prescribed or inserted IUDs, and whether they would attend a course to increase their skill at insertion, if offered. The following part of the questionnaire, asked Family physicians about detecting minor and major complications of IUCDs

Another part of the questionnaire form asked about dysmenorrhea ,menorrhagia ,infection, backache ,post abortion IUCD ,post-delivery IUCD ,women with fibroid ,women with cesarean section, congenital anomaly of uterus ,women with anemia ,cervical erosion ,and endometrial cancer.

Statistical analysis

The information regarding each participant was transferred into a code sheet and data entry was done using computer Pentium IV. Data were presented in suitable tables and figures . Percentage were calculated for the various group variables.

Results :

Of 94 doctors ,4 were researchers cannot reach them , A total of 90 doctors complete the questionnaire (95.7)% .about 63% were female,&36.6% were male. About 38.8% of respondents prescribed intrauterine contraceptive devices,40% inserted them.

41% of sample had Data collection too 10 or more years ,family physicians in practice more than 10 years were more likely than those in practice less

than 10 years(54% vs. 35%). Women physicians were more likely than men to prescribe (56% vs. 9%)and insert IUCDs (61% vs. 3%),about 38% of respondents were interested in IUCDs course.

About 60% of participants revealed pelvic inflammatory disease &perforation as a significant risk of IUCDs .About 72.2% thought thrown was a major risk of failure of IUCDs.

About indications for IUCDs, most participants not recommended them to women with no children 65.5%. For emergency contraception(46%)not

prescribed IUCDs. For patient with small fibroids (63.3% not recommend IUCDs & 31.1% would recommend marina.

For patient with PID during last year(71.1% of family physision not recommend IUCDs), immediately after abortion &delivery, 55.5%&54.4% not recommend IUCDs respectively.

For patient with endometrial or cervical cancer, 73.3% of FP's not recommend IUCDs .

Figure 1. percentage of FPs ranking side effects of IUCDS as major or minor in accordance with literature-supported clinical guidelines

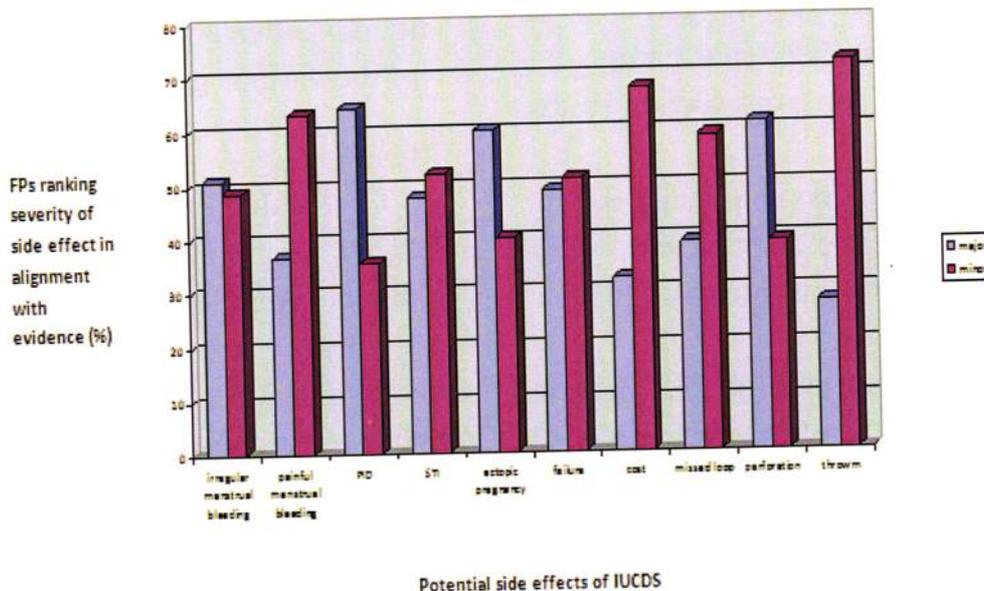


Figure 2. percentage of fps recommending IUCDS as a contraceptive option in various situation

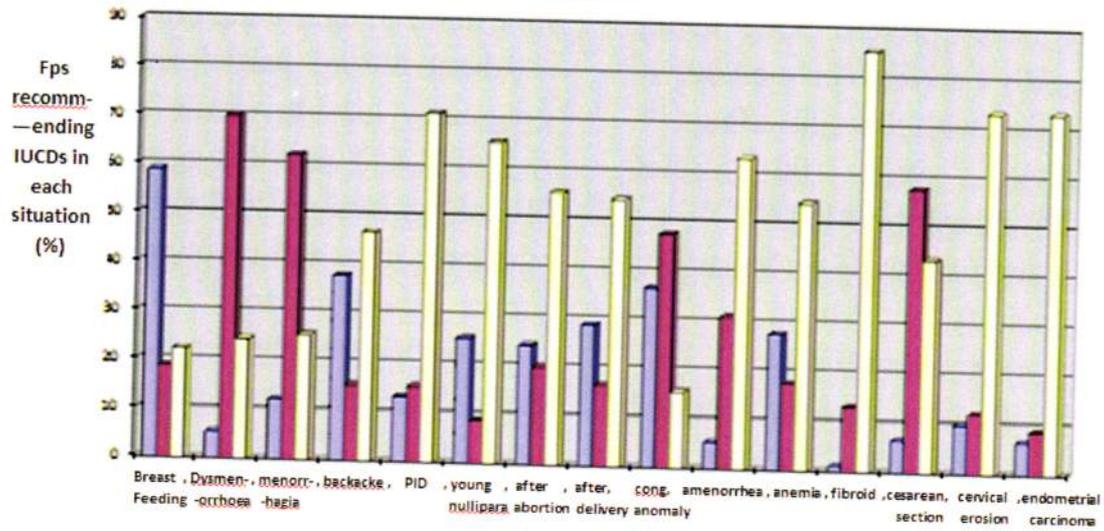


Table (1) Participants' prescription, insertion, and interest in IUCDS course in relation to their sex & number of years in practice: N=90.

patterns	YEARS IN PRACTICE				SEX		TOTAL
	0-9 N=43	10-19 N=37	20-29 N=10	30 or more ZERO	male N=33	female N=57	
Prescribe IUCDS							
Yes	15	20	Zero		3	32	35
NO	28	17	10		30	25	45
Insert IUCDS							
Yes	17	17	2		1	35	36
No	26	20	8		32	22	54
Interested in a course of IUCDS insertion							
Yes	20	12	2		3	31	34
No	23	25	8		30	26	56

Discussion

The IUCD is one of the most highly effective ,safe ,private ,long acting ,and rapidly reversible method of contraception with few side effects⁽¹²⁾.

Worldwide ,over 100 million women have used the IUCD⁽¹³⁾.

This is the first study in Mosul city to quantify Mosul FP's misconceptions about IUCD.

Result of the present research showed the difference between FP's knowledge of the harmful effect of and indications for use of IUCD.

This study showed that about 50% ,38% of FP's surveyed consider irregular vaginal bleeding and dysmenorrhea respectively as a major risk .In contrary to the clinical guideline that levonorgestril IUCD reduces the menstrual bleeding and cramping, it has been used extensively to treat heavy menstrual bleeding and is used in Europe and UK as an alternative to hysterectomy⁽¹⁴⁾.But copper IUCD can cause side effect in females ,increasing uterine bleeding and pain⁽⁴⁾.

The WHO has considered recent PID and sexually transmitted disease within the past 3 months as absolute contraindication to the use of an IUCD⁽¹³⁾.And this go with our study which reveal that more than 70% of surveyed FP's ranked PID as a major risk .Cochrane collaboration review concluded that neither doxycycline

nor azithromycin before IUCD insertion can have a benefit⁽¹³⁾.

About 60%of participants thought pregnancy outside uterus is a major risk of IUCD ,and this agree with the clinical guidelines that show 6 of 13 textbooks reported pregnancy outside uterus as a significant⁽⁶⁾.

About half of the respondents said that failure leading to pregnancy was a major risk of IUCD ,and this agree with the study done in Canadian FP's in 2008⁽¹⁵⁾.

Only 33% of the respondents in our study consider cost as a major risk ,in keeping with the clinical guidelines that says that copper IUCDs (mostly used devise in Mosul)is not expensive ,but the Marina device is expensive⁽¹⁶⁾.

Despite clinical guidelines that the incidence of uterine perforation due to migration into adjacent structures ranges from one to three per 1000 insertions^(17,18) ,more than 60%of respondents in our study ranked perforation as a major risk .

About 72%of surveyed FP's thought thrown loop was a major risk and this agree with the clinical guidelines that if the IUCD moves out of its normal position ,it may not be effective at preventing pregnancy⁽¹⁸⁾.

Regarding using IUCD :three quarter of the respondents in current study recommend IUCDs (both

copper and marina)to women during lactation ,and this goes with clinical guidelines⁽¹⁹⁾.

Even though emergency device is mentioned as indication for copper IUCD, have low failure rate if used during seven days after intercourse⁽¹⁵⁾, only 53% of respondents would recommend them post coitally ,this may be due to their religious attitude .

There are minimal randomized data on IUCD use in nullipara women⁽²⁰⁾. Though not contraindicated in clinical guidelines^(13,21), about 65% of the respondents in this study would not recommend IUCD for nullipara women .

Present study showed that more than 50% of the FP's surveyed not recommend IUCD immediately after abortion or after vaginal delivery ,and this agree with the clinical guidelines that conclude that expulsion rate is higher if IUCD used immediately after abortion or vaginal delivery⁽²²⁾ .

The study goes with the clinical guidelines ,and about 85%of the respondents recommend IUCD to women hoping to conceive within 2-3 years^(14,22) .

Most of family physisions in our study not recommend IUCD to women with cervical or endometrial cancer ,and to women with congenital anomaly of the uterus ,and this

finding was in keeping with the WHO contraindication of IUCD 2004⁽¹³⁾.

In contrast to the clinical guidelines⁽¹⁸⁾, about 2/3 of the FP's surveyed in our study recommend IUCD to women with severe anemia.⁽²³⁾

About 80%of the FP's surveyed in Mosul not recommend IUCD to women with cervical erosion and this agree with the American College of Obstetricians and gynecologists that advice to do pelvic examination before insertion of IUCD^(24,25).

Conclusion:

the present study revealed FPs misconception of IUCD like relation of device with perforation of uterus ,pregnancy outside uterus ,and pelvic inflammatory disease .result of study advice to educate FPs in programmed of training Another researches needed to increase FPs awareness about IUCD

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